



Comments by Congressman Nick Smith, MI-07

OHIO/MICHIGAN BIOFUELS CONFERENCE DECEMBER 9, 2002 PERRYSBURG, OH

I would like to thank the Michigan and Ohio Corn and Soybean organizations, the Michigan and Ohio Farm Bureaus, Michigan State and Ohio State University Extension programs, and ADM for sponsoring this excellent forum to provide the latest information about the production and use of biofuels made from biomass resources and strategies for industry development in Michigan and Ohio. With the national goal to be more energy independent and with the impact of clean air regulations, there is a growing demand for biomass-based cleaner fuels produced in our biofuels industries. This conference is designed to provide state-of-the-art information for education, promotion, production and use of biofuels in Michigan and Ohio.

You know, as much of a visionary as Michigander Henry Ford was for the automobile industry, few realize how much of a visionary he was for renewable fuels development and use. He envisioned automobile parts to be made from renewable resources, such as plastics made from soybean extracts, and he expected alcohol, made from renewable resources such as corn, to be a fuel used in automobiles. In the early to mid-20s, the Standard Oil Company marketed a 25% by volume absolute ethanol in gasoline. High corn prices and difficult logistics for the transportation and use of this gasohol all but killed this early attempt for alternative fuel sources. In the 1930s, Henry Ford and others diligently promoted biofuels and built a fermentation plant for making ethanol specifically for use in motor fuels. This plant supplied gasohol for more than 2000 service stations in the Midwest. However, in the 1940s, low petroleum prices closed the ethanol production plant, gasohol was replaced by petroleum, and the American farmers market opportunities were shelved.

Rudolf Diesel ran his prototype diesel engine on peanut oil. He envisioned that diesel engines would operate on a variety of vegetable oils. But when petroleum-based diesel fuel hit the marketplace, it was cheap, efficient, and readily available, and it became the diesel fuel of choice.

More recently, problems in the Middle East created the gas shortages in the 1970s. During that "Arab Oil Embargo", Earl Butz asked me to be director of Energy for the USDA, and I became a member of the President's Oil Policy Committee. The committee met at 6:30am every Monday with Bill Simon over at the White House. We were concerned about the economy. We were concerned about producing enough food. We were concerned about the fact that we depended on imports for 38% of petroleum energy. Alternative fuels became part of the solutions to the problem. Soon, ethanol blends became gasoline extenders and provided an octane enhancer. We were giving grants and guaranteed loans to build ethanol plants. That was not enough and in 1979 we started the tax subsidy program. In Michigan, we established an state ethanol tax exemption program that was changed and disbanded in the late 1980s. Currently, Michigan and Ohio do not offer tax exemptions for ethanol in gasoline mixtures.

The Clean Air Act of 1990 mandated the sale of oxygenated fuels in urban areas to reduce unhealthy levels of carbon monoxide. The petroleum additive MTBE was developed as a substitute additive to comply with the Clean Air Act. While effective as an oxygenate that markedly reduces carbon monoxide and organic compound emissions, it has been linked as a carcinogenic agent, and has been found to contaminate in-ground water. 17 states have now banned MTBEs, including Michigan (effective by June 2003) and Ohio (effective by July 2005). Legislation is pending in 8 other states.

If MTBEs are completely banned, ethanol is the only oxygenate that is available. The banning of MTBEs is of some debate, whether or not they are effective in reducing carbon emissions into the air. On March 20, 2000, the Agency announced it was beginning the process of requiring a reduction or phase-out of MTBE use. The principal issues for Congress are whether MTBE use should be limited or phased out and whether Clean Air Act provisions concerning reformulated gasoline should be modified to allow refiners to discontinue or lessen their use of oxygenates. Numerous bills have been introduced in Congress to address these and related issues. Petroleum companies say they can make cleaner burning fuels that do not require MTBEs, and these fuels actually burn cleaner than fuels supplemented with MTBEs. Auto makers say their motors burn cleaner and more efficient now as well. If MTBE were removed from gasoline without amending the Clean Air Act, there would be a huge demand for ethanol to provide the oxygenate standard required by the Clean Air Act. However, on the other side of the argument, Senators Inhofe, Smith and Feinstein have sought to waive the oxygenate standard in the Clean Air Act while maintaining the performance standards in the act. If this legislation were to pass, this could be detrimental to the ethanol industry. The Senate version of the Energy Bill would have increased the production and use of ethanol from 1.5 billion gallons to 5 billion gallons in fuel by 2012. Changing the oxygenate standard would re open the Clean Air Act, and this would not be popular with the environmental groups. These issues will be addressed further in the 108th Congress.

With the recent events in the Middle East, and increasing fuel prices since 1999, there is increasing demand for petroleum alternatives. Through the late 1990s, ethanol has become increasingly competitive. As well, increasing concerns on global climate change from greenhouse gas production, more impetus is being put on using biofuels to help decrease carbon monoxide emissions in an environmentally friendly manner. In 1997, Ford and Chrysler announced that they would each produce 250,000 flexible fuels vehicles, which run on gasoline or E85 (up to 85% ethanol in gas). The Energy Policy Act (EPact) of 1992 mandated states buy so many alternative or flexible fuels vehicles (FFVs), some 3/4s of all new vehicles need to be FFVs.

Our nation is approaching a bio-based revolution that will fundamentally change the way we produce and consume energy and industrial products. From biological resources, we can derive products as diverse as fuels and lubricants, heat and electricity, chemicals, food, feed, building materials, paper, clothing, plastics, and much, much more.

The US consumes (year 2000) 20 million barrels of petroleum per day, or about 1/4 of the total world oil production. The US imports 11 barrels of oil for every 10 barrels produced domestically. A primary goal of a National Energy Policy is to decrease our dependence on foreign oil by conservation and using a more diverse mix of domestic resources. Biomass technologies, can contribute to this new mix of resources for energy, and value-added chemicals and materials. Currently, there are 69 ethanol plants in operation that produce nearly 2.5 billion gallons of ethanol. 96 more ethanol plants are under construction. This industry is booming. Michigan received a \$4.8 million grant to help build the ethanol plant in Caro, MI and the just opened facility has a capacity to produce 40 million gallons per year from corn.

Title IX of the 2002 Farm Bill re-authorizes the Biomass R&D Act of 2000. It provides funding of \$405 million over 5 years. The energy title establishes new programs and grants for procurement of biobased products to support development of biorefineries; to educate the public about benefits of biodiesel fuel use; and to assist eligible farmers, ranchers, and rural small businesses in purchasing renewable energy systems. It encourages bio-based product use by federal agencies, establishes bio-refinery grants and loans, provides \$75 million for biomass R&D, provides partial compensation to producers of ethanol/biodiesel for commodities (\$204 million) and allows harvesting biomass from CRP land.

For the 2002/2003 marketing year, the USDA-ERS prognosticators predict the US will plant over 78 million acres of corn producing over 10 billion bushels, while over 73 million acres of soybeans will be planted producing almost 3 billion bushels. With increased ethanol use, Sparks Companies predict corn prices to increase to \$2.20/bu while acreage increases to 84 million acres by 2006/2007. Corn used for ethanol is predicted to double during this time to 1.4 billion bushels.

For the future of this technology, we cannot reduce our dependence on foreign oil by increasing production of biofuels without providing increased research efforts in bio-energy production. Major efforts are being made in improving bioethanol production, including concentrated and dilute acid hydrolysis to maximize sugar yields from the cellulose fractions of biomass, enzymatic hydrolysis, and biomass gasification and fermentation. Increasing research in biodiesel fuel mixtures has been received well by the implement industry. John Deere has approved the use of up to 5% concentration soy-based Biodiesel fuel in its PowerTech® diesel engines. This development should add credence to the further development of bio-based alternative fuels that benefit both the environment and the agricultural community.

In conclusion, bioenergy and bio-based products from crops, trees, and agricultural, industrial, municipal and forestry wastes will be used to heat our homes, fuel our automobiles, light our buildings, and provide industrial and consumer products for everyday use. Bio-energy and bio-based products can help the US utilize domestic energy resources more wisely, while holding great promise for our economy and providing new production avenues for our farmers. They will contribute to cleaner air and water while reducing dependence on petroleum and foreign oil. Additionally, increased production of carbon-fixing corn and soybeans will help mitigate greenhouse gas emissions. Further growth in biobased products and bioenergy production will stimulate rural development efforts in farming, forestry and associated service industries.
